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(19) **United States**(12) **Patent Application Publication****Newman et al.**(10) **Pub. No.: US 2018/0093947 A1**(43) **Pub. Date: Apr. 5, 2018**(54) **POTENT AND SELECTIVE INHIBITORS OF MONOAMINE TRANSPORTERS; METHOD OF MAKING; AND USE THEREOF**(71) Applicant: **THE UNITED STATES OF AMERICA, as represented by the Secretary, Department of Health and Human, Bethesda, MD (US)**(72) Inventors: **Amy Hauck Newman, Phoenix, MD (US); Oluyomi M. Okunola-Bakare, Beltsville, MD (US); Jianjing Cao, Ellicott City, MD (US)**(21) Appl. No.: **15/830,244**(22) Filed: **Dec. 4, 2017****Related U.S. Application Data**

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(57)

ABSTRACT

Disclosed herein are bisarylthioacetamides and bisarylthioethylamines useful as inhibitors of monoamine transporters. The compounds are potent and/or selective inhibitors of dopamine (DA), serotonin (5-HT), and/or norepinephrine (NE) reuptake via their respective transporters, DAT, SERT and NET. Also disclosed are methods for eliciting a wake-promoting or cognitive or attention enhancing effect and for treating substance use disorders, attention deficit (hyperactivity) disorder, depressive disorders, bipolar disorder or other neuropsychiatric disorders sleep disorders or cognitive impairment using the compounds.